



# STATE OF NEW YORK DEPARTMENT OF HEALTH

Corning Tower

The Governor Nelson A. Rockefeller Empire State Plaza

Albany, New York 12237

Antonia C. Novello, M.D., M.P.H., Dr.P.H.  
*Commissioner*

Dennis P. Whalen  
*Executive Deputy Commissioner*

August 19, 2005

**TO:** Hospitals, Long-Term Care Facilities, Providers and Local Health Departments

**FROM:** NYSDOH Bureau of Communicable Disease Control

**HEALTH ADVISORY UPDATE #1: GASTROINTESTINAL ILLNESS  
LINKED TO THE SPRAY GROUNDS AT SENECA LAKE STATE PARK**

**Please distribute immediately to the Infection Control Department, Emergency Department,  
Employee Health Service, Infectious Disease Department, Pediatrics,  
Director of Nursing, Medical Director, Laboratory Service, and all patient care areas.**

## **UPDATE**

This communication updates the New York State Department of Health's (NYSDOH) Health Advisory dated August 16, 2005. Multiple local health departments (LHDs) and the NYSDOH are investigating cases of gastrointestinal illness in individuals who visited the Spray Grounds in the Seneca Lake State Park since early June. Twenty LHDs have received a total of 2,202 reports of gastrointestinal illness from individuals who visited the park between June and August 15. Symptoms include nausea, vomiting, cramping, diarrhea, and fever. Thirteen persons have tested positive for *Cryptosporidium*. Testing for additional agents is pending. Eleven persons have been hospitalized. No deaths have been reported. The Spray Grounds attraction at the park was closed on August 15 for the rest of the season. However, because the incubation period for cryptosporidiosis can be up to 12 days, and because secondary cases are very common, heightened surveillance is needed to identify additional cases.

## **SURVEILLANCE AND TESTING**

NYSDOH is requesting that medical providers enhance surveillance for gastrointestinal illness in patients at your facility and affiliated clinics. Patients who present with gastrointestinal symptoms including nausea, cramps, diarrhea, vomiting, or fever should be interviewed to determine if they visited Seneca Lake State Park. Stool specimens should be obtained from patients meeting the above criteria and submitted to your local laboratory for bacterial, viral, and parasitic testing. Ova and parasite (O & P) with *Cryptosporidium* testing should specifically be requested. Past experience in similar outbreaks suggests that multiple pathogens are often identified in patients. Although *Cryptosporidium* may predominate, broad testing is requested until all agents involved in the current outbreak are identified.

For O & P testing, stool should be submitted to the laboratory either refrigerated fresh or in 10% formalin. For those patients who test positive for *Cryptosporidium*, a portion of the stool in formalin (preferably 5

ml or more) should be forwarded to NYSDOH Wadsworth Center. If there are questions on laboratory testing, please contact Wadsworth Center at (518) 474-4177.

## REPORTING

Any identified increase in cases of gastrointestinal illness or individual cases of gastrointestinal illness associated with the Seneca Lake State Park should be reported promptly to the local health department where the patient resides. If the patient resides outside New York State, please notify the NYSDOH Regional Epidemiology Program at (518) 473-4439.

## INFORMATION ABOUT CRYPTOSPORIDIOSIS

*Cryptosporidium* is shed in the feces of infected humans and animals. People become infected by ingesting the organism. *Cryptosporidium* can be spread by person-to-person or animal-to-person contact and by drinking contaminated water. Infected individuals can shed the organism in their stool for several weeks after they recover from the illness. The incubation period may range from one to 12 days with an average of seven days. Because cryptosporidiosis is transmitted by the fecal-oral route, the greatest potential to transmit the organism comes from infected people who have diarrhea and from diapered children. All people are presumed susceptible to infection with *Cryptosporidium*. In healthy individuals with normal immune systems, signs and symptoms generally persist for two weeks or less. However, immunocompromised persons may have severe and long-lasting illness.

## TREATMENT

Most diarrhea is self-limited, and treatment should be tailored to individual patients using clinical judgment.

- Treatment for any diarrheal illness, regardless of cause, is hydration. Patients should be encouraged to drink non-caffeinated, non-sugary fluids at a tolerable pace. Water alone is insufficient and could cause harm if over-consumed. Pedialyte (in children) or other electrolyte replacement solutions are appropriate for moderate diarrhea.
- Nitazoxanide (Trade name: Alinia) is FDA-approved for adults and children greater than one year of age for the treatment of diarrhea caused by *Cryptosporidium* sp. or *Giardia lamblia*. The three-day course will often stop watery diarrhea associated with these infections. **However, nitazoxanide will not stop shedding of *Cryptosporidium* oocysts, nor will it shorten the duration of shedding.** Thus, it may not be indicated in patients with mild diarrhea.
- Nitazoxanide may be beneficial for refractory cases of confirmed cryptosporidiosis or giardiasis. In addition, caution in patients with aspirin sensitivity, diabetes, liver or kidney disease, or other gastrointestinal disorders is advised.

## INFECTION CONTROL RECOMMENDATIONS

To prevent the spread of cryptosporidiosis and other gastrointestinal illnesses, individuals should do the following:

### General Public

- Thoroughly wash hands after using the toilet, changing diapers, or coming in contact with fecal matter in any way.
- Avoid swallowing water in pools, lakes, ponds, rivers, and any other recreational water settings.
- Individuals who are experiencing gastrointestinal illness should not swim while ill and for two weeks after their symptoms resolve.

### **Health Care Facilities**

- Health care workers with diarrhea should be relieved from direct patient contact until symptoms resolve and infection with bacterial enteric pathogens is ruled out.
- In general, patients or residents with acute diarrhea with a likely infectious cause should be placed on standard precautions. However, patients with acute diarrhea who are incontinent or who are less than 6 years of age should be placed on contact precautions.

### **Food Service**

- Employees who visited the Seneca Lake State Park Spray Grounds attraction and are experiencing gastrointestinal illness should be excluded from work and should contact their health care provider and their local health department.
- Employees with any diarrheal illness should be excluded from work until symptoms resolve. Additionally, workers with amebiasis, *Shigella*, *Salmonella*, *E. coli* O157, cholera or typhoid are required to have two negative stool cultures prior to returning to work.
- Employees must wash hands thoroughly and frequently, especially after using the toilet.
- Employees must ensure there is no bare hand contact with ready-to-eat foods by properly using gloves and/or utensils.

### **Child Day Care Centers**

- Children in day care centers who have diarrhea (one or more loose stools) must be sent home and advised to seek medical attention.
  - Children who have been diagnosed with *E. coli* O157, *Shigella*, or *Salmonella* must be excluded until clearance is obtained from the local health department.
  - Children who have recovered from diarrheal illness (and **not** diagnosed with the illnesses above) may return to day care provided that they no longer have symptoms and are counseled regarding careful handwashing practices.
- Staff should ensure that all children practice careful handwashing after each toilet visit and before handling food for themselves or others. Staff should ensure that there are adequate supplies of liquid soap and paper towels for handwashing.
- Day care centers should clearly separate diapering and food-handling areas and responsibilities. Disposable gloves should be used when changing diapers, and disposable paper should be used to cover diaper-changing areas. Hands should be washed thoroughly after removing disposable gloves.
- If one or more cases of gastrointestinal illness are identified in a day care center, water play activities should be temporarily suspended, particularly among diapered-aged children. This includes child wading pools, water tables and other communal water-based activities.
- If a person with gastrointestinal illness associated with Seneca Lake State Park is identified in a day care center, enhanced environmental disinfection measures are needed. No disinfectant is guaranteed to be completely effective against *Cryptosporidium*. However, hydrogen peroxide (3%) is usually effective. Day care centers should clean and disinfect toys, tabletops, and high chairs at least twice daily. Diaper-changing areas should be disinfected after each use. Dishwasher-safe toys may be washed in a commercial dishwasher that has a dry cycle or a final rinse that exceed 113° F for 20 minutes, or 122° F for 5 minutes, or 162° F for 1 minute. Cloth toys may be washed and heat-dried in a clothes dryer for 30 minutes.